



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1500; Project Identifier MCAI-2023-00642-T; Amendment 39-22511; AD 2023-14-11]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-100-1A10 airplanes. This AD was prompted by reports of unexpected pitch upset upon autopilot disconnect. This AD requires revising the Non-Normal Procedures section of the existing airplane flight manual (AFM) associated with Auto Flight. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for

submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1500; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Bombardier Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; website [bombardier.com](https://www.bombardier.com).

- You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1500.

FOR FURTHER INFORMATION CONTACT: Deep Gaurav, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email: deep.gaurav@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2023-1500; Project Identifier MCAI-2023-00642-T” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Deep Gaurav, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email: deep.gaurav@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

Transport Canada, which is the aviation authority for Canada, has issued Transport Canada AD CF-2023-26, dated May 3, 2023 (Transport Canada AD CF-2023-26) (referred to after this as the MCAI), to correct an unsafe condition on certain Bombardier, Inc., Model BD-100-1A10 airplanes. The MCAI states that during several in-service events, the crew experienced an unexpected pitch upset upon autopilot disconnect. Investigations of these events identified that the airplane gained altitude via manual command of the elevator control surface without the use of the horizontal stabilizer pitch trim, even though the manual pitch trim was fully functional. The autopilot was then engaged while the airplane was in an out-of-trim condition. Subsequent disengagement of the autopilot when the horizontal stabilizer is not correctly trimmed can lead to high control column forces and difficulties in controlling the airplane.

The FAA is issuing this AD to address the unsafe condition on these products. You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1500.

Related Service Information under 1 CFR Part 51

Bombardier has issued the following AFM procedures, which include a Caution to the Auto Flight Non-Normal Procedures, to instruct crews to minimize changes to airspeed and configuration when using the autopilot disconnect switch in an out-of-trim situation.

- Section 05-14, Auto Flight, of Chapter 05, Non-Normal Procedures, of the Bombardier Challenger 300 (Imperial Version) Airplane Flight Manual, Publication No. CSP 100-1, Revision 68, dated June 14, 2022. (For obtaining the procedures for Bombardier Challenger 300 (Imperial Version) Airplane Flight Manual, Publication No. CSP 100-1, use Document Identification No. CH 300 AFM-I.)

- Section 05-14, Auto Flight, of Chapter 05, Non-Normal Procedures, of the Bombardier Challenger 350 Airplane Flight Manual, Publication No. CH 350 AFM, Revision 34, dated June 14, 2022. (For obtaining the procedures for Bombardier Challenger 350 AFM, Publication No. CH 350 AFM, use Document Identification No. CH 350 AFM.)

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES section.

FAA’s Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

AD Requirements

This AD requires accomplishing the actions specified in the service information described previously.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies forgoing notice and comment prior to adoption of this rule because several events have occurred where the crew experienced an unexpected pitch upset upon autopilot disconnect. Such a result is hazardous as it could lead to high control column forces and difficulties in controlling the airplane. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forgo notice and comment.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 338 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
1 work-hour X \$85 per hour = \$85	\$0	\$85	\$28,730

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:
2023-14-11 Bombardier, Inc.: Amendment 39-22511; Docket No. FAA-2023-1500;
Project Identifier MCAI-2023-00642-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER
DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-100-1A10 airplanes, certificated
in any category, serial numbers 20003 through 20910 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code: 27, Flight controls.

(e) Reason

This AD was prompted by reports of unexpected pitch upset upon autopilot
disconnect. The FAA is issuing this AD to address an unexpected pitch upset occurrence
when the autopilot is engaged while the airplane is in an out-of-trim condition and later
disengaged. The unsafe condition, if not addressed, could result in high control column
forces and difficulties in controlling the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Airplane Flight Manual (AFM) Revision

Within 30 days after the effective date of this AD: revise the existing AFM to
include the information specified in Section 05-14, Auto Flight, of Chapter 05, Non-
Normal Procedures, of the Bombardier Challenger 300 Airplane Flight Manual (Imperial
Version), Publication No. CSP 100-1, Revision 68, dated June 14, 2022; or the

Bombardier Challenger 350 Airplane Flight Manual, Publication No. CH 350 AFM, Revision 34, dated June 14, 2022; as applicable.

Note 1 to paragraph (g): For obtaining the procedures for Bombardier Challenger 300 AFM (Imperial Version), Publication No. CSP 100-1, use Document Identification No. CH 300 AFM-I.

Note 2 to paragraph (g): For obtaining the procedures for Bombardier Challenger 350 AFM, Publication No. CH 350 AFM, use Document Identification No. CH 350 AFM.

(h) Additional AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in paragraph (i)(2) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or Transport Canada; or Bombardier, Inc.'s Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Additional Information

(1) Refer to Transport Canada AD CF-2023-26, dated May 3, 2023, for related information. This Transport Canada AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1500.

(2) For more information about this AD, contact Deep Gaurav, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email: deep.gaurav@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Section 05-14, Auto Flight, of Chapter 05, Non-Normal Procedures, of the Bombardier Challenger 300 Airplane Flight Manual (Imperial Version), Publication No. CSP 100-1, Revision 68, dated June 14, 2022.

Note 3 to paragraph (j)(2)(i): For obtaining this section of Bombardier Challenger 300 AFM (Imperial Version), Publication No. CSP 100-1, use Document Identification No. CH 300 AFM-I.

(ii) Section 05-14, Auto Flight, of Chapter 05, Non-Normal Procedures, of the Bombardier Challenger 350 Airplane Flight Manual, Publication No. CH 350 AFM, Revision 34, dated June 14, 2022.

Note 4 to paragraph (j)(2)(ii): For obtaining this section of Bombardier Challenger 350 AFM, Publication No. CH 350 AFM, use Document Identification No. CH 350 AFM.

(3) For service information identified in this AD, contact Bombardier Business

Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-2999; email ac.yul@aero.bombardier.com; website bombardier.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th Street, Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on July 13, 2023.

Victor Wicklund, Deputy Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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